

REMARKS

Following entry of the Supplemental Reply to Office Action filed August 30, 2007, claims 1-11 were pending in this application. In the Reply to final Office Action filed on February 19, 2008, claim 1 was amended and new claims 12-15 were added. In the Advisory Action mailed April 1, 2008, the Office states that the claim amendments filed with the Reply to final Office Action on February 19, 2008 were not entered as the new limitation of claim 1 is indefinite under 35 U.S.C. § 112, second paragraph. With this reply, claims 1-11 remain pending, claims 12-15 are canceled, and claims 16-19 are added.

Claim 1 stands further rejected under 35 U.S.C. § 102(b) for lack of novelty over Melissaris et al. (*Eur. Polymer J.* 25:455-460, 1989; hereafter “Melissaris”). Claims 1 and 3-8 are rejected under 35 U.S.C. § 103(a) as unpatentable over Kawamonzen et al. (U.S. Patent No. 6,316,170; hereafter “Kawamonzen”) in view of Melissaris. Claims 1 and 3-11 are also rejected under 35 U.S.C. § 103(a) as unpatentable over Machido et al. (U.S. Patent No. 6,159,654; hereafter “Machido”) in view of Melissaris. Applicants address each of these rejections below.

Claim Amendments

Claim 1 has been amended to specify that in certain embodiments, the substituent C of Formula I is “a combination of a (i) C₁₋₃₀ linear or branched monovalent organic group; and (ii) a cyclic monovalent organic group.” Previously non-entered claims 12-15 have been canceled and are presented herein as new claims 16-19. Support for this amendment is found, for example, in the previously filed claims 1, 2, and 12-15, and on page 3, lines 1-4 of the specification. No new matter has been added by the present amendment. Applicants reserve the right to pursue any cancelled subject matter in this or in a continuing application.

Rejection under 35 U.S.C. § 112, second paragraph

Non-entered claim 1 stands rejected as being indefinite under 35 U.S.C. § 112, second paragraph. As the basis for this rejection, the Office states “it is not clear whether the C₁₋₃₀ and branched groups [are] present in the same monomeric molecule or ... [in] a mixture of different monomers having either linear or branched substitutes” (Advisory Action, page 2).

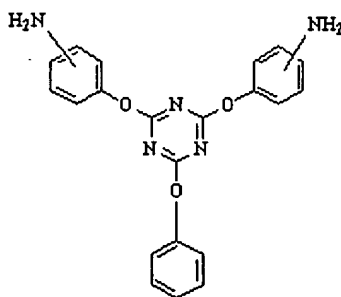
Applicants have amended claim 1 to clarify that the claim is directed to single monomeric molecules. As amended, claim 1 recites that the substituent C of Formula I is “a combination of a (i) C₁₋₃₀ linear or branched monovalent organic group; and (ii) a cyclic monovalent organic group.” Applicants submit that amended claim 1 encompasses monomeric molecules of Formula I, wherein A is -O- or -COO-; B is -O-, -COO-, -CONH-, or -OCO-; and C is a combination of a C₁₋₃₀ linear or branched monovalent organic group, with a cyclic monovalent organic group.

In view of the revised amendment to claim 1 and the remarks above, Applicants request that the rejection for indefiniteness be withdrawn.

Rejection under 35 U.S.C. §102(b)

Claim 1 stands rejected under 35 U.S.C. § 102(b) for lack of novelty over Melissaris. Applicants have addressed this rejection by amendment of claim 1 and with the following remarks.

The Office states that Melissaris discloses the following diamine structure:



which is identical to one, recited in claim 1 (Formula 1), when A is -O-, B is -O-, and C is a cyclic monovalent organic group.

Presently amended claim 1 is limited to: (1) diaminotriazines in which A (see formula I of claim 1) is -O- or -COO-, B is -O-, -COO-, -CONH-, or -OCO-, and C is a linear or branched monovalent organic group, or *a combination of (i) a C₁₋₃₀ linear or branched monovalent organic group; and (ii) a cyclic monovalent organic group*; and (2) diaminotriazines in which A is -COO-, B is a direct bond, and C is a C₁₋₃₀ linear, branched or cyclic monovalent organic group, or combination thereof. As amended, claim 1 no longer includes the diaminotriazines disclosed by Melissaris (i.e., diaminotriazine molecules having the structure of Formula 1, where A is -O-, B is -O-, and C is a *cyclic monovalent organic group*).

In view of the amendment to claim 1 and the remarks above, Applicants request withdrawal of the rejection for lack of novelty.

Rejections under 35 U.S.C. §103(a)

Claims 1 and 3-8 are rejected under 35 U.S.C. § 103(a) as unpatentable over Kawamonzen in view of Melissaris. Claims 1 and 3-11 are rejected under 35 U.S.C. § 103(a) as unpatentable over Machido in view of Melissaris. Applicants have addressed these rejections by amendment of claim 1 and with the following remarks.

Examiner states that in view of the structure disclosed by Melissaris, Kawamonzen teaches “a polyamic acid, comprising tetravalent aromatic or alicyclic group (column 13, line 45) and aromatic diamine compounds (column 14, line 35, column 16, line 50) and siloxane-based diamines;” a “dianhydride comprising a aromatic or alicyclic group or their mixture (column 14, lines 25 and 50);” and a polyamic acid with an inherent viscosity between 0.3 dl/g and 1.5 dl/g (Office Action mailed October 19, 2007; pg. 3-4).

The Examiner further states that Machido teaches “a polyamic solution with a liquid crystal aligning agent (column 1, line 15) based on heterocyclic cycle (triazine) containing

polyimide;” “a polyamic acid, comprising a tetravalent aromatic or alicyclic group (column 5, line 20) and aromatic diamines compound (column 5, line 20) and siloxane-based diamines;” and “a method of forming liquid crystal element layer by coating polyamic acid onto substrate and....imidizing the coating” (Office Action mailed October 19, 2007; pg. 4-5).

Applicants submit that Melissaris in combination with Kawamonzen and/or Machido considered alone or in combination, fail to teach the diaminotriazines of amended claim 1. As discussed *supra*, amended claim 1 no longer includes the diaminotriazine molecules taught by Melissaris (i.e., diaminotriazine molecules having the structure of Formula 1, where A is -O-, B is -O-, and C is a cyclic monovalent organic group). Applicants note that the limitations of claim 1 are incorporated into claims 3-11. Accordingly, claims 1 and 3-11, as amended, are directed to diaminotriazine molecules that are not taught or suggested by Melissaris and this deficiency is not remedied by Kawamonzen or Machido.

Because the prior art relied upon for these rejections fail to teach each and every limitation of claims 1 and 3-11, as amended, Applicants submit that the amended claims are not obvious over Melissaris in view of Kawamonzen and/or Machido.

In view of the amendment of claim 1 and the remarks above, Applicants request withdrawal of the rejections for obviousness.

CONCLUSION

Applicants submit that the application is now in condition for allowance, and such action is hereby requested.

Applicants note that this response is filed with a Request for Continued Examination.


Applicants respectfully request a telephonic interview with the Examiner to discuss this response (617-428-0200).

Enclosed is a Petition to extend the period for replying to the final Office Action for two months, to and including April 21, 2008, as April 19, 2008 falls on a Saturday, and a check in payment of the required extension fee. Applicants note that one-month extension has already been paid in this case with the Reply to final Office Action filed on February 19, 2008.

If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: April 18, 2008



Paul T. Clark
Reg. No. 30,162

Jeffrey J. Ellison, Reg. No. 51,649, for
Paul T. Clark

Clark & Elbing LLP
101 Federal Street
Boston, MA 02110
Telephone: 617-428-0200
Facsimile: 617-428-7045